

GREEN MATTERS

A newsletter from the Alberta Environmentally Sustainable Agriculture Council

Sharing the Wealth



Roger Bryan/AAFRD

From AESA Council's Chair

by Bruce Beattie,
Alberta Milk Producers

This issue of Green Matters examines opinions and activities surrounding what can be acrimonious relations involving that non-renewable resource, land. The old adage, "they aren't making any more", rings true today as Alberta's vigorous economy attracts people and industry. The wide-open spaces of the West aren't as wide as they used to be.

It is easy to get bogged down in statistics on population growth or to rail at the loss of productive land to asphalt and high rises. I could marvel at the economic disparity between land values associated with growing food and those associated with building houses. As a Texas farmer replied when I asked him what his next crop would be once the orange groves were gone, "Houses. I can't afford to farm this land."

It is easy to get stuck in the problem. But how do we get unstuck and start working toward solutions?

First, we can take a broader look at the issue. Despite immense challenges, world food production has continued to outstrip population growth, with new technologies in production and genetics providing higher yields. And while the problem of competing interests for farmland is important, the effect of land management on global farmland productivity is more significant. Nearly two billion hectares of crop and grazing land are suffering from moderate to severe soil

degradation, an area larger than the United States and Mexico combined. Every year, wind and water erosion strip away some 25 billion metric tons of topsoil from the world's farmland.

And second, those of us in agriculture need to recognize that while we depend upon the land to support our livelihood, others have a right to the resource. How we interact with other stakeholders will be a measure of our success.

The articles in this issue are about getting unstuck. They focus on innovative options and collaborative solutions. They tell the stories of people who are making a difference for their farmland, rangeland, watershed and community here in Alberta. Often they are people searching for a middle path that yields economic benefits from the land while maintaining other values like wildlife habitat and watershed protection.

Behind many of the options described in this issue lies the willingness to build relationships between stakeholders. Such relationships are essential to helping the multiple values of the landscape become better recognized. Another key element is wise management of the land, no matter what land uses are involved. The Alberta Environmentally Sustainable Agriculture Program's efforts to assist farmers and ranchers in maintaining healthy, productive landscapes will complement the multi-use aspect of land management.

WHAT'S INSIDE

Synergy on Energy

Approaching Urban Encroachment

Farming & Forestry Team Up

Council Profiles:
Lynden Hutchinson
Dennis McKerracher

Trusting in the Land

Synergy on Energy

With such contentious issues as flaring, emissions and disruption of agricultural land use, bitter land use and environmental conflicts might seem inevitable between the oil and gas industry and local communities. But the Sundre Petroleum Operators Group (SPOG) is taking a middle way through the conflict. By bringing the companies and the community together, SPOG is finding mutual solutions that reduce impacts while allowing the industry to produce energy.

SPOG was created by 13 oil and gas companies in 1992 to address local issues in the Sundre-Caroline area. After some painful conflicts between the industry and the community in the mid-1990s, SPOG expanded

to include local communities. "We had to find better ways to work with these people because the old tools weren't working," explains Shell Canada's Grant Schwartzenberger. "We had to have community involvement and joint solutions."

"It takes good communication and understanding to achieve resolution."

Today SPOG includes about 30 oil and gas companies and representatives from 14 community groups and from the Alberta Energy and Utilities Board (EUB), the regulating body for development of Alberta's energy resources. Along with intensively developed oil and gas resources, the Sundre-Caroline area has agriculture, recreation, tourism, urban and rural communities, and a rapidly growing rural residential population.

Rancher Dave Brown represents the community of Crammond on SPOG. He has been involved in resolving oil and gas industry issues since he moved to the area in 1986, after retiring from Shell. He says, "The biggest factor in resolving concerns is to have all the stakeholders at the table at the same time and get communication going so you understand each other. And then it's looking at the best option. That was never done before. The oil and gas companies used to say, This is what we're doing. Now they say, This is what we'd like to do; we'd like your input. As soon as you do that, you look at options. It sounds simple, but it takes good communication and understanding to achieve resolution."

Brown describes an example of one SPOG committee's innovative option to reduce flaring (controlled burning of waste gas) from wells in a new sour gas field. "Hunt Oil used a surface pipeline from its well site to a Shell pipeline. Then the gas that would normally

have been flared up the stack into the atmosphere for everybody around here to breathe, was processed by the Shell gas plant. That cut the flaring by 98.9%." The cost for Hunt Oil was partially offset by the value of the gas that was processed, rather than flared. As well, the company learned ways to make the method less expensive in the future. To Brown, the most impressive aspect was the cooperation between the two companies. He says, "Five years ago that wouldn't have happened."

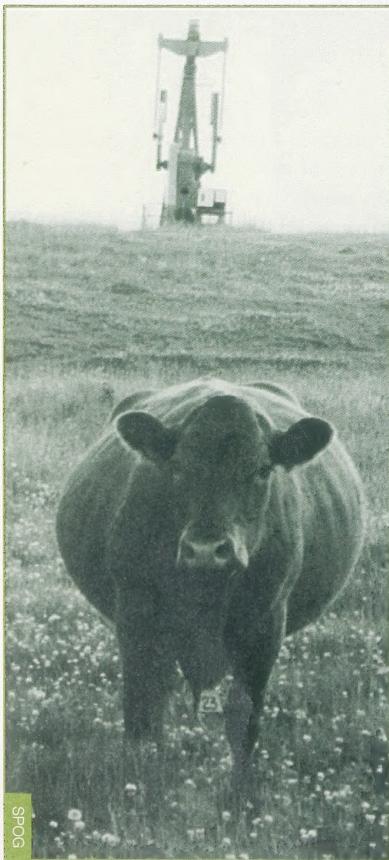
Collaboration is crucial to SPOG's success, notes Gerry Schalin of Provident Energy Trust, one of the companies that started SPOG. "There are issues that a company has to deal with. If you go alone, it can be pretty lonely -- spending all your time and effort chasing down information and technologies, dealing with the residents. If you do it together, it's a win-win for everybody." Brown says SPOG's approach has not only increased the use of options to reduce impacts like noise, flaring and disruption to farming operations. It has also resolved many problems without formal EUB hearings.

Another key to SPOG's success is its set of procedures, called 'process maps', to resolve individual concerns. Schalin explains, "If a person has an issue about something, they can phone our SPOG office. We have process maps for each type of issue. We log each complaint on our process map and follow it through to an end result."

There are roughly 60 other community groups, sometimes called "synergy groups", focusing on local oil and gas issues in Alberta. Brown says only some groups are taking SPOG's synergistic, mutual-solution approach. However, efforts like last year's major synergy conference and plans to create an umbrella organization for synergy groups may expand the use of this approach.

Schwartzbenberger believes synergy groups are the way of the future. He says, "The government has the regulations, but at the end of the day we need to have the right to operate in the community. We will get that right from the community members and the way we choose to work with them."

For more information, contact the SPOG office at 403-638-5117 or visit its website (www.spog.ab.ca).



Approaching Urban Encroachment

“Are we just going to grow, grow, grow?”

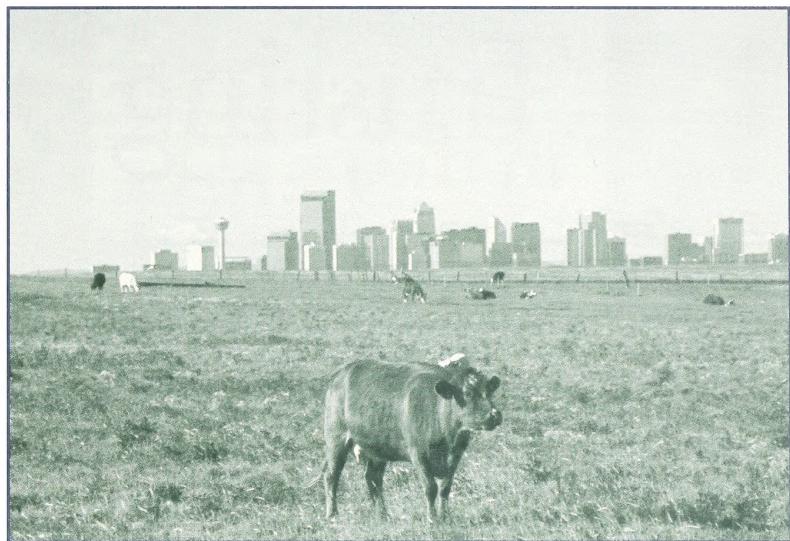
Rapid growth of urban and residential land use around Calgary is creating complex challenges for farmers and neighbouring communities. And these challenges are raising some fundamental questions about growth.

Farming on the edge

“Up close and personal” could describe Joe Zink’s experience of urban encroachment. The Zinks have two farms in the Municipal District of Rocky View. Their dairy farm is on Calgary’s west side, surrounded by wealthy subdivisions. Their grain and beef operation is about a half kilometre north of the City’s limits.

Urban encroachment’s biggest threat to agriculture is economic, says Zink. “I’d be very hard-pressed to make \$20 an acre from farming. But the land I’m on here at the dairy farm is easily worth \$30,000 an acre. It makes much more economic sense to sell the land and go somewhere else where land is less expensive.”

Another major concern for Zink is the loss of political voice. For example, Rocky View residents recently developed a long-term land use plan for the M.D. He says, “It sounds very democratic. But the reality is that you’ve got 10 farmers owning 80% of the land, and more than 4600 people owning the other 20%. Those 4600 people, who have the overwhelming vote, vote to preserve their ‘country way of life’ and keep the remaining farmland as farmland. And the farmer who has hung on there for years thinking he could sell out later now finds that he can’t.”



Alberta Agriculture, Food and Rural Development

As a way to deal with these and a host of other concerns, Zink is very involved in dialoguing with the non-farm public. For instance, he and the other farmers in the area formed a watershed group called the Farmers of the Elbow Watershed (FEW) about three years ago. FEW’s projects provide a way for these farmers to demonstrate their environmental stewardship and to share ideas with non-farm water users.

Nevertheless, Zink says, “At some point, the City of Calgary has to ask, ‘Are we just going to grow, grow, grow?’” Without limits to growth, he believes today’s environmental stewardship projects are pointless in the long run.

Radical option in Okotoks

Okotoks is one of the few communities that has asked, ‘Are we just going to grow, grow, grow?’ And the revolutionary answer is, ‘No!’

Located next door to Calgary, the town’s current population is about 12,500, and it’s growing fast. Okotoks’ Municipal Manager Will Pearce says, “We’ll likely exceed 10% growth per annum in 2002. To put that in perspective, Calgary is running a little over 3% and Lethbridge a little over 1%.” This galloping growth is generating a dizzying array of costly and complex challenges, particularly with respect to infrastructure and service requirements.

Pearce says, “About six years ago, our Town Council asked, ‘How big do we really want to be?’ They took that fundamental question to all the residents through a general household survey and open houses.” The residents of

Okotoks chose to limit the Town’s population to 25,000 to 30,000, and to limit its area to a well-defined boundary.

The 25,000 to 30,000 population limit was developed based on several factors, including the long-term carrying capacity of the Sheep River, Okotoks’ water supply. The Town’s growth limits are set in its own development plan and in the regional development plan with its neighbour, the M.D. of Foothills.

Pearce says, “Every other municipal development plan in Alberta assumes unlimited growth.” But Okotoks and the M.D. have bucked that trend, opting for what Pearce calls “a logical transition in land use” around Okotoks -- from agricultural land, to agricultural land with some rural residential parcels, to denser rural residential parcels, to urban density in Okotoks. He says, “If rural residential development is scattered all over the place, you start to compromise the agricultural use of those lands, and to create some fairly significant problems in traffic, access, and so on.”

Okotoks has combined its remarkable decision to limit growth with a diverse set of “Sustainable Okotoks” initiatives. These include innovative public programs for conserving water and projects like developing a less costly and more environmentally friendly approach to wastewater treatment. As a result, Okotoks has won provincial and international environmental awards, and the Town’s residents are even more strongly behind the strategy than they were six years ago.

On the fringe of Alberta's boreal forest, landowners and a forestry company are teaming up to plant trees on agricultural land for a range of economic and environmental benefits. Instead of land use conflict, they have land use cooperation.

Under its Poplar Farming Program, Alberta-Pacific Forest Industries Inc. (Al-Pac) is seeking government approval to sign 30-year, renewable leases with landowners to grow poplar on the leased land. The landowner receives annual payments for the leased land based on the established rental rates for agricultural land in the landowner's area. Al-Pac plants the land to a hardy, fast-growing poplar species developed by the Prairie Farm Rehabilitation Administration.

The program's objectives are to have 60,000 acres under leases by 2021, and to cut and replant 3000 acres per year after 20 years. The program is available to landowners in a region bounded by the Athabasca River to the north, Lloydminster to the east, Westlock-Barrehead to the west and Morinville to the south.

"With poor commodity prices, farmers are looking to diversify."

Al-Pac's Chuck Kaiser says, "The program's main benefit for Al-Pac is that it allows us to manage our Forest Management Agreement [FMA] area timber on a more sustainable basis." Al-Pac is interested in wood from the poplar farms in part because oil sands development, recreational use and other land uses affect the amount and type of wood available in its FMA in northeastern Alberta. In addition, Al-Pac has set aside some of the land in its FMA for studying natural forest processes on land not disturbed by industrial activity so the company can model its timber harvesting practices after natural disturbances like fire.

Kaiser sees three major benefits for landowners who participate in the program. "The first, it gives them a guaranteed farm income on the leased part of their land." He adds, "What we

Farming and Forestry Join Forces



Poplar Farm

Alberta-Pacific Forest Industries Inc.

have found out from Alberta Agriculture, Food and Rural Development is that the lease payment is as attractive or more attractive than the returns from the normal rotation of canola, cereal grains and forage crops."

"The second benefit is that when we lease the ground, we also offer a contract to the farmer for any or all of the maintenance the farmer wants to do. So he has additional income for five years," says Kaiser. After five years, the trees are usually large enough for shade from the canopy to minimize weed growth.

"The third benefit is environmental," he says. For example, farm fields next to woodlots benefit from reduced wind erosion, higher spring moisture from snow trapping, and lower evaporation. The woodlots also provide habitat and travel corridors for wildlife, and the trees store carbon for reduced greenhouse gas emissions.

Terry Barkley joined the program in 2000, its first year. He owns about 80 acres 7 miles east of Athabasca. He says, "Most of the land in this part of the country is marginal farmland at the best of times. And with just 80 acres it was far from being a viable farming operation. We just looked at it as an acreage to live on."

Barkley chose to do most of the maintenance on the 50 acres he has leased to Al-Pac. He says, "I needed a little tractor for working around the yard anyway, and they pay me pretty well for doing it. It's a nice little sideline income."

He sees the program as a good option for farmers in his area. He says, "With poor commodity prices, farmers are looking to diversify." He says it provides a reliable income for people who are looking to slow down or who want to retire and keep their land.

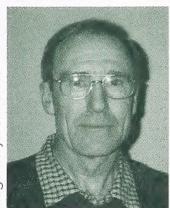
Kaiser says, "We think the cost of the program is very comparative to what our costs would be in logging up in our Forest Management Agreement area. The average trucking distance [from the FMA to the mill] is about five hours one-way or 10 hours cycled time. So even though we're going to put lots of dollars into poplar farming for the first five years, over the next 15 years all those costs added together on a per volume basis will be the same as if you're trying to truck it 10 hours."

With its collaborative approach to land use, the Poplar Farming Program is generating economic advantages for both Al-Pac and the landowners, and environmental advantages for everyone.

COUNCIL PROFILES

Lynden Hutchinson

This spring's rain and surprising May snowfalls have brought the gift of moisture to Lynden Hutchinson's farm 20 miles west of Foremost. But good moisture conditions have been all too rare in this area in recent years.



Roger Bryan/AAFRD

"Last year we couldn't get any moisture – it was devastating," he says. "We had some high winds and the soil blew, especially in areas where the land is sandy and where the land had been summer fallowed. There's such low organic matter in the soil that it doesn't take much to break down the soil structure."

As chair of the South Region's AESA Farm Based Committee and also as councillor for the County of Forty Mile, Hutchinson is well aware of how serious these dry, blowing conditions are. "Soil erosion is a big concern in the South, especially in these abnormally dry years with extremely high winds," he says. "In the northeast end of our County, the topsoil was drifting so badly in places that it had to be dozed off the roads."

"You can't mine the soil; you need to nourish it."

On his dryland farm, he uses minimum tillage to reduce soil erosion and conserve soil moisture. "I have a four-year rotation, normally an oilseed, followed by two years of cereal crops, and then a summer fallow year – either chemfallow or conventional fallow, depending on the weed population," he says.

He believes caring for the land is crucial. "We're only farming the land for our period of time here on earth. We need to leave it in good condition for the people who follow," he says. "You can't mine the soil; you need to nourish it."

After serving as a member of the South's Farm Based Committee for several years, Hutchinson became the committee's chair last year and joined AESA Council as representative of that committee. He sees the Farm Based Program as vital in "promoting environmentally sustainable practices and encouraging people to learn about better methods of treating their soil, their water, and their air."

But making change happen remains a challenge. He explains, "Some farmers can't afford to make the changes right away because of economics. But when they're able to, they shift toward maintaining the sustainability of the land."

And, although it's been a gradual process, he has seen much positive change in the last decade. "More and more people are doing minimum till, direct seeding, crop rotations, continuous cropping and chemfallow. I think people are becoming more aware of their responsibility for preserving the land, water and air."

Dennis McKerracher

"We in the hog industry are very proud of our environmental stewardship," says Dennis McKerracher. "It's important to us because we live here. If hog farming posed an environmental hazard, would I have my wife and kids here?"

The McKerrachers have a 170-sow farrow-to-finish operation 9 miles southwest of High River. He grew up in Ladner, B.C. and worked in the nursery and seed industries in B.C. for many years. Then in 1992, the McKerrachers decided to try the pig business. He and his wife run the operation, and he also works off-farm for a feed company.

The environment is a key consideration in all aspects of their hog operation. For example, they use various practices to minimize water wastage – vital in their area where groundwater quality and quantity are ongoing concerns. This year they're going to try using parasitic wasps rather than insecticides to control flies. And, of course, manure management is a priority.

"Most people in urban areas have no idea what we're doing."

They rent their 180 acres to neighbours under arrangements that ensure a "positive loop," he explains. "The manure from our operation is spread on the land, and we use barley grown on our land in our operation." As well, they have reduced the phosphorus content in the pigs' diets in order to reduce the manure's phosphorus content, and they soil test to ensure good nutrient management. The result? "We're improving the tilth of our land!" he says. The manure adds organic matter, moisture and nutrients for healthier soil and better crops.

McKerracher represents Alberta Pork on AESA Council. He has been on the board of Alberta Pork for three years, and this year he became a member of the executive committee. He is also a member of Alberta Pork's Sustainable Environment Committee.

Alberta Pork, an organization of pork producers, is very active in a wide range of projects to improve environmental stewardship including: the Environmental Farm Plan initiative; development of a beneficial management practices manual for hog producers; and participation in the Oldman River Basin initiative to improve water quality in that basin.

McKerracher says, "To me, environmental stewardship is one of the pillars of Alberta Pork and of pork producers. Without protecting the environment we will no longer be sustainable. It's as simple as that."



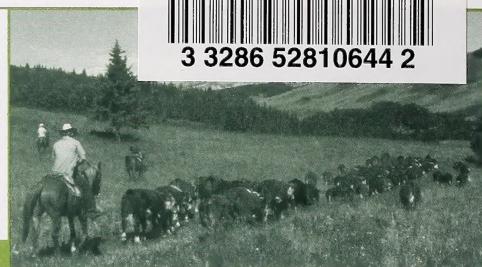
Roger Bryan/AAFRD

From McKerracher's perspective, AESA's partnership with Growing Alberta (a program to share information about Alberta's agriculture and food industry) is crucial. "The proportion of people in cities who have a direct link to farming is becoming smaller and smaller. Most people in urban areas have no idea what we're doing," he says. "It's important for AESA Council to continue to work with Growing Alberta to get our message to the general public about agriculture and environmental stewardship."



Trusting in the Land

Alberta's Ranchlands: 'Ancient, Adapted, and Self-renewing.'



Gordon Cartwright

Accelerating pressures for residential and recreational development in the ranchlands along the Eastern Slopes of the Rocky Mountains have given rise to another approach to land use concerns: the Southern Alberta Land Trust Society (SALTS).

Rancher and SALTS president Francis Gardner explains, "Ranching is a very non-intensive land use. It's not competitive with acreages or any endeavour that takes land to a higher economic value. With that in mind and with the idea that we need to promote the heritage, the wisdom, the beauty and the productive characteristics of these Eastern Slopes, SALTS was created."

This award-winning land trust is "a community-based, rancher-driven, non-profit organization dedicated to preserving the ecological, productive, scenic and cultural values of Alberta's prairie and foothill regions," says Gardner.

A land trust is a non-profit organization for conserving landscapes. Created in 1998, SALTS wanted to tailor its approach to the specific concerns of the region. "We wanted to do this at the local level. It's something the people in ranching along the Eastern Slopes can do themselves and have a lot of pride in doing. And it's a way for them to communicate to people across the country and get the message out."

SALTS' strategies include creating awareness of the value of rangelands, providing information on options

for intergenerational transfer of ranching operations, and using conservation easements to protect ranchlands. A conservation easement is a voluntary agreement between a landowner and an agency like SALTS to limit development on the specified property in order to preserve its character. SALTS currently has easements to preserve nearly 2000 acres.

Gardner emphasizes that ranchlands provide many essential functions, such as watershed protection and wildlife habitat, that falter as other land uses grow. "Ranchlands are ancient, adapted, and self-renewing. The grass cover and types of stands of grasses that live along these Eastern Slopes are adapted to grazing by ungulates [hoofed animals]. And when the buffalo went, the cattle moved into that natural niche, allowing these grasslands to continue to function." He adds, "The Eastern Slopes is the largest intact bioregion in Alberta. We're trying to keep this area in one piece so it will do its job for the whole province."

For Gardner, being involved in SALTS is demanding but deeply rewarding. "SALTS is about living and breathing decisions – decisions about the functioning of the web of life that makes us all able to survive on this planet." If you are interested in developing a land trust in your area, Gardner says, "Find a group of like-minded people and be prepared to create an entity that is your own. Be willing to work hard to get done what you want to do and garner support for it from everybody you can think of. And contact us."

For more information, call SALTS at 1-877-999-7258 or visit the SALTS website (www.salts-landtrust.org).

Green Matters, Issue No. 12, Summer 2002

©AESCA Council, 2002

Green Matters is the newsletter of the Alberta Environmentally Sustainable Agriculture (AESCA) Council. AESCA Council consists of 29 representatives from Alberta's agriculture and food processing industry, environmental organizations and government. Its mandate is to: identify and evaluate environmental issues facing Alberta's agriculture and food processing industry; encourage the industry to proactively address these issues; advise the Alberta Minister of Agriculture, Food and Rural Development on these issues; and direct the AESCA Program.

The purpose of **Green Matters** is to provide a forum for discussion of environmental issues in Alberta's agriculture and food processing industry.

To subscribe to Green Matters, call 780-422-4385.

Editorial Board: Bruce Beattie, John Kolk, Marshall Eliason

Editor: Roger Bryan

Contributors: Carolyn King, Bruce Beattie

Design and Typesetting: P40 Communications



Alberta Environmentally Sustainable Agriculture Program